

### Remarks

In view of the foregoing amendments and the following remarks, reconsideration of the outstanding office action is respectfully requested.

Initially, applicants would like to thank Examiners Kumar and Einsmann for the courtesy extended to the undersigned representative during the personal interview held May 25, 2005. The substance of that interview is summarized below.

The rejection of claims 1-13, 15-43, and 45-47 under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 4,711,892 to Manoury et al. ("Manoury") is respectfully traversed.

Manoury discloses 5-nitrofuryl derivatives of pyridylpropenoic acid hydrazides. These compounds are not polymers, let alone derivatives of poly(2-propenal, 2-propenoic acid) as presently claimed (i.e., those formed by reaction between poly(2-propenal, 2-propenoic acid) and an organic compound containing one or more hydroxyl groups under conditions effective to form the derivative having protected carbonyl groups). As discussed during the above-noted interview, and acknowledged by Examiners Kumar and Einsmann, Manoury fails to teach or suggest the presently claimed polymeric antimicrobial composition, products containing the same, and any uses thereof. Therefore, the rejection of claims 1-13, 15-43, and 45-47 as anticipated by Manoury is improper and should be withdrawn.

The objection to claims 1-13 and 15-47 is overcome by the above amendments and should therefore be withdrawn.

The rejection of claims 1-9, 12-23, and 43-47 under 35 U.S.C. §102(a) as anticipated by, or alternatively under 35 U.S.C. § 103(a) for obviousness over, PCT Publ. No. WO 00/03723 to Melrose et al. ("Melrose") is respectfully traversed.

Melrose relates to processes for forming stable compositions of poly(2-propenal, 2-propenoic acid) that resist precipitation of the polymer under specified pH conditions. The method of Melrose, as noted by the U.S. Patent and Trademark Office ("PTO") at page 5 of the outstanding office action, involves dissolving poly(2-propenal, 2-propenoic acid) in an aqueous base, adding an organic compound containing one or more hydrophobic groups, and then acidifying the solution. Aside from possibly using the same starting material as in the presently claimed invention, the composition of Melrose is distinctly different from the polymeric antimicrobial composition of claim 1.

Melrose does not teach or suggest forming a reaction product between poly(2-propenal, 2-propenoic acid) and an organic compound containing one or more hydroxyl groups, where the reaction is performed under conditions effective to form a derivative of poly(2-propenal, 2-propenoic acid) having protected carbonyl groups. Melrose makes no mention whatsoever of forming a reaction product, let alone the presently claimed polymeric antimicrobial composition.

The PTO again relies on Example 8 of Melrose, suggesting that the method of forming the composition disclosed therein teaches the derivative of poly(2-propenal, 2-propenoic acid) as presently claimed. Applicants respectfully disagree. As discussed in the previous amendment and during the above-noted interview, Melrose makes no mention of a reaction product, despite the conditions employed therein. Melrose describes making a stable formulation of poly(2-propenal, 2-propenoic acid) whereby the polymer is introduced into PEG 1000 at 70°C. Once dissolved, NaOH micropellets were added and the solution stirred for 2 minutes. Thereafter, octyl methoxy cinnamate was added, followed by polymeric emulsifiers, while maintaining the temperature for an additional 15 minutes. The resulting composition was poured with stirring into room temperature water, effectively cooling the composition. Thus, the total amount of time that the composition remained at elevated temperature was about 17 minutes.

Based on results in Example 8 *of the present application*, albeit using PEG 200 rather than PEG 1000, it is highly improbable that the conditions of Example 8 in Melrose would have been effective to form the derivative of poly(2-propenal, 2-propenoic acid) as recited in claim 1. The reaction conditions (i.e., time and temperature) employed in Example 8 of Melrose fall outside the window of effective conditions. According to Example 8 *of the present application*, a reaction temperature of 70°C would require between 24 and 120 hours to obtain a product as presently claimed. Thus, the approximately 17 minutes at 70°C would not have been effective to form the derivative of poly(2-propenal, 2-propenoic acid) as recited in claim 1.

Because Melrose fails to teach or suggest the polymeric antimicrobial composition of claim 1, Melrose cannot have taught or suggested any subject matter of claim 2-9, 12-23, and 43-47, all of which ultimately depend from claim 1.

For these reasons, the rejection of claims 1-9, 12-23, and 43-47 as anticipated by, or for obviousness over, Melrose is improper and should be withdrawn.

The rejection of claims 24-42 under 35 U.S.C. § 103(a) for obviousness over Melrose is respectfully traversed for the same reasons noted above. Because method claims 24-42 ultimately depend from claim 1, and Melrose would not have rendered obvious the product of claim 1 for the reasons noted above, Melrose cannot have rendered obvious claims 24-42 dependent

thereon. For this reason, the rejection of claims 24-42 for obviousness over Melrose is improper and should be withdrawn.

The rejection of claims 1-13 and 15-47 for obviousness double-patenting over claims 1-25 of Melrose is respectfully traversed.

In the first instance, this rejection is improper because Melrose is merely an application. Thus, the rejection should be a *provisional* obviousness double-patenting rejection. As such, applicants are within their right to request withdrawal of this rejection to the extent that this rejection is the only rejection that remains. *See Manual of Patent Examining Procedure* § 804 at page 800-19 (August 2001).

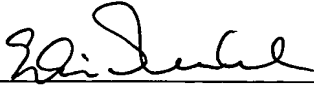
Nevertheless, applicants submit that the rejection is improper on the merits. Claims 1-17 are method claims and, as such, they should not have been recited in the rejection. Claim 18 of Melrose recites a composition that includes "poly(2-propenal, 2-propenoic acid) and one or more of the following: an anionic surfactant, a phenol, ethylene diamine tetra acetic acid, a lower alkanol, isothiazolinones, glutaraldehyde, sunscreen agent, and an absence of low molecular weight components of the composition." Melrose does not claim a polymeric antimicrobial composition that contains a derivative of poly(2-propenal, 2-propenoic acid) having protected carbonyl groups as presently claimed, which derivative is formed as the reaction product of poly(2-propenal, 2-propenoic acid) and an organic compound containing one or more hydroxyl groups. Thus, the presently claimed subject matter is distinct from the claimed subject matter of Melrose, and the presently claimed subject matter is non-obvious over the claimed subject matter of Melrose for substantially the same reasons noted above with respect to the other rejections over Melrose.

For all these reasons, the rejection of claims 1-13 and 15-47 for obviousness double-patenting over claims 1-25 of Melrose is improper and should be withdrawn.

In view of all of the foregoing, applicants submit that this case is in condition for allowance and such allowance is earnestly solicited.

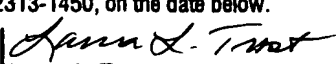
Respectfully submitted,

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